REMARKS

This is in response to the Office Action mailed on May 20, 2004. Claims 1, 10, 13, 15, 24, 26, 27, 32, 38-43, 49, 52 and 53 are amended to further clarify the subject matter recited in the claims, and claims 12, 14, 23, and 34 are canceled; as a result, claims 1-11, 13, 15-22, 24-33 and 35-53 are now pending in this application.

§112 Rejection of the Claims

Claim 27 was rejected under 35 USC § 112, second paragraph. Claim 27 has been amended to correctly depend on claim 26. Applicant respectfully requests withdrawal of the rejection, and reconsideration and allowance of the claim.

§102 Rejection of the Claims

Claims 52 and 53 were rejected under 35 USC § 102(e) as being anticipated by Dickens et al. (US 6,549,966). Applicant respectfully traverses. Applicant is unable to find a showing in the reference that the devices 180 and 182 are master and slave expansion slots. These claims have been amended to clarify the recited subject matter.

With respect to amended independent claim 52, Applicant is unable to find, among other things, in the cited portion of Dickens et al. a device for expanding a computer interface, comprising an upstream connector, a PCI bus structure, a bus control module, a master slot and at least one slave slot; and an uninterruptible power supply (UPS), as recited in the claim. The upstream connector connects to a computer (external to the device) through a Universal Serial Bus (USB) using a USB protocol. The PCI bus structure has a PCI protocol, and the bus control module is connected to the upstream connector and to the PCI bus structure. The bus control module is adapted to provide a protocol conversion between the USB protocol and the PCI bus protocol. A master slot and at least one slave slot is connected to the PCI bus structure. The bus control module is connected to the UPS and is adapted to provide power from the UPS to the computer through the upstream connector.

With respect to amended independent claim 53, Applicant is unable to find, among other things, in the cited portion of Dickens et al. a method as recited in the claim. An upstream connector, a PCI bus structure and an uninterruptible power supply (UPS) are provided in a

device external to a computer. A master expansion slot and at least one slave expansion slot connected to the PCI bus structure are provided. Power is provided from the UPS to the computer through the upstream connector. A USB protocol is used to communicate between the device and the computer through the upstream connector. The USB protocol is converted to the PCI bus protocol for use by at least one expansion slot to provide legacy expansion support.

Applicant respectfully requests withdrawal of the rejection, and reconsideration and allowance of amended claims 52 and 53.

§103 Rejection of the Claims

Claims 1-23 and 27-51 were rejected under 35 USC § 103(a) as being unpatentable over Dickens et al. (US 6,549,966) in view of Comer (US 6,081,856). Applicant respectfully traverses. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the cited references (MPEP §2143). The lengthy office action combines the references to reject a claim, and then concludes the rejection with a paragraph beginning "It would have been obvious to one skilled in the art to combine the teaching..." For example and not by way of limitation, the rejection states in paragraph 11 (Page 7) that it would be obvious to combine with a UPS, but does not identify support in the cited references. Additionally, the rejection states in paragraph 13 (Page 8) that it would be obvious to use the control module as a power source for the PC, again failing to identify support in the cited references. Applicant traverses, respectfully asserts that these statements are conclusionary and without support, and respectfully requests the Examiner to cite portions of the references relied upon to provide a suggestion for combining the references. If the rejection includes official notice taken because all of the claimed features, including a fair suggestion to combine the references, are not shown or suggested in the references, Applicant respectfully requests the Examiner to either provide a reference that describes the claim features / suggestion to combine that are the subject of the official notice or to submit an affidavit (37 CFR §1.104(d)(2)).

With respect to amended independent claim 1, Applicant is unable to find, among other things, in the cited portions of Dickens et al. and Comer either a showing or fair suggestion of a device, comprising a backplane, at least one expansion card, and an uninterruptible power supply

(UPS), as recited in the claim. The backplane has at least one expansion slot and an upstream connector for connecting with a computer via a serial bus. The device is external to the computer. The expansion card couples with the expansion slot, and includes at least one port to provide an interface with the computer through the serial bus. The UPS is connected to the backplane. The backplane is adapted to provide power to the computer through the upstream connector, and to communicate UPS status and control data with the UPS. Claims 2-11 depend on amended independent claim 1, and are believed to be in condition for allowance for at least the reasons provided with respect to claim 1.

With respect to amended independent claim 13, Applicant is unable to find, among other things, in the cited portions of Dickens et al. and Comer either a showing or fair suggestion of an apparatus, comprising a control module, an uninterruptible power supply (UPS), a hub, and an external functions unit, as recited in the claim. The control module includes a port to provide both serial communication and power to a computer external to the apparatus. The UPS is coupled to and controlled and monitored by the control module. The control module includes at least one port to provide UPS status and control communication with the UPS. The UPS provides power to the computer through the control module. The hub provides USB/USB+ outputs, and is coupled to the control module. The external functions unit is coupled to the hub, and provides legacy expansion for the computer through the serial communication link. Claims 15-22 and 27-31 depend on amended independent claim 13, and are believed to be in condition for allowance for at least the reasons provided with respect to claim 13.

With respect to amended independent claim 32, Applicant is unable to find, among other things, in the cited portions of Dickens et al. and Comer either a showing or fair suggestion of a system comprising a legacy free personal computer (PC), a housing containing an uninterruptible power supply (UPS), a bus monitor and control module connected to the UPS, a USB/USB+ hub, and an external functions unit to provide legacy expansion for the PC, and a serial bus coupling the PC to the bus monitor and control module, as recited in the claim. The bus monitor and control module distributes direct current (DC) power from the UPS to the PC over the bus. Claims 33 and 35-42 depend on amended independent claim 32, and are believed to be in condition for allowance for at least the reasons provided with respect to claim 32.

With respect to amended independent claim 43, Applicant is unable to find, among other things, in the cited portions of Dickens et al. and Comer either a showing or fair suggestion of a method as recited in the claim. A serial communication link is provided to a computer. A device, including a UPS and backplane, is provided external to the computer for coupling to the serial communication link. The backplane is connected to the UPS with a port to provide UPS status and control communication for the UPS. The backplane has at least one expansion slot and an upstream connector for coupling to the serial communication link to serially communicate with the computer and provide power from the UPS to the computer. At least one expansion card, including at least one port as an interface for the computer, is provided for coupling with the expansion slot. Claims 44-51 depend on amended independent claim 43, and are believed to be in condition for allowance for at least the reasons provided with respect to claim 43.

Claims 24-26 were rejected under 35 USC § 103(a) as being unpatentable over Dickens et al. (US 6,549,966) in view of Comer (US 6,081,856) as applied to claim 1 above, and further in view of Shinichi et al. (US 6,438,708). Applicant respectfully traverses. Applicant is unable to find teaching or suggestion to make the claimed combination and the reasonable expectation of success in the cited references (MPEP §2143). Applicant respectfully requests the Examiner to cite portions of the references relied upon to provide a suggestion for combining the references, to provide a reference or submit an affidavit that describes the claim features that are the subject of the official notice. Claims 15-22 and 27-31 depend on amended independent claim. 13, and are believed to be in condition for allowance for at least the reasons provided with respect to claim 13.

Applicant respectfully requests withdrawal of the §103 rejections, and reconsideration and allowance of the claims.

Page 14 Dkt: 977.039US2

Reservation of Right to Swear Behind Reference(s)

Applicant maintains its right to swear behind any documents relied upon for a rejection under 35 U.S.C. §§102(a), 102(e), 103/102(a), and 103/102(e). Statements distinguishing the claimed subject matter over the cited references are not to be interpreted as admissions that the documents are prior art.

Title: BUS CONTROL MODULE FOR IMPROVING LEGACY SUPPORT

Conclusion

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6960 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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Page 15

Dkt: 977.039US2

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Date 9-20-04

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<u>CERTIFICATE UNDER 37 CFR 1.8:</u> The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this day of September, 2004.

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Name	Signature